

studied include age (<45 vs. ≥45 years), hypertension, diabetes, congestive heart failure (CHF, history of heart failure or ejection fraction [EF] ≤40%), gender, prior MI, final diagnosis, and MI type. **RESULTS:** Of 1166 consecutive patients, 1073 underwent CAG, considered eligible: normal coronaries, 113 (10.5%); leaving 960 patients with CAD (MI [289, 30.1%], UA [604, 62.9%], Undetermined ACS [32, 3.3%], CSA [35, 3.7%]); 30% patients were diabetic. Proportion of hypertensive patients was significantly higher among diabetics (57.7% vs. 34.9% non-diabetics, $P<0.001$). The presence of CHF in the diabetic as well as non-diabetic patients was similar. For all patients with CAD, around 40% had SVD on CAG; for diabetics, 35% patients had TVD whereas the proportion was only 24% among non-diabetics. In the linear stepwise regression, age ≥45 years, presence of CHF and diabetes showed significant positive correlation with the severity of CAD ($p<0.05$). **CONCLUSIONS:** Clustering of several cardiovascular risk factors at presentation may lead to the worse prognosis in patients with CAD from India. Findings from this study ascertain more severe angiographic findings in diabetic patients than that in non-diabetic controls regarding the severity of CAD.

PCV10

RACIAL VARIATION IN HEART FAILURE COMORBIDITIES AND THERAPY USE IN A MEDICAID POPULATION

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OBJECTIVES: To explore the association between race, comorbidities, and therapy use among patients with heart failure (HF) in a contemporary Medicaid population. **METHODS:** Medical/prescription/enrollment records from the Maryland State Medicaid Managed Care Organization/Fee-for-services, ages 18-64, non-dual enrolled, with HF diagnosis between July 1, 2005 to December 31, 2009, followed at least 3 months. Diagnosis for HF defined as earliest encounter claim that included ICD-9 code 428.xx. Comorbidity diagnosis determined between earliest claim and within three months post-HF diagnosis. First-line therapies ascertained using pharmacy claims with first-date-of-service between HF diagnosis and the end of follow up. Variation in comorbidities and therapy use across race/ethnicity is described. **RESULTS:** Among 15,764 HF patients, 60% (n=9,388) were black, 33% (n=5,158) white, 6% (n=919) other, 2% (n=299) Hispanic. Over half were female (55%); 72% older than 44 years. Prevalence in race/ethnicity: COPD (40% white, 22% black, 20% other, 11% Hispanic; $p<0.001$), stroke (20-22%; $p=0.17$), renal dysfunction (38% Hispanic, 30% black, 27% other, 22% white; $p<0.001$), diabetes (38-42%; $p=0.04$), psychological disorder (65% white, 52% black, 46% other, 37% Hispanic; $p<0.001$), hyperlipidemia (44% white, 39% Hispanic, 31% other, 33% black; $p<0.001$), chronic ischemic heart disease (47% white, 41% black/Hispanic/other; $p<0.001$), hypertension (76% black, 72% Hispanic, 68% white, 67% other; $p<0.001$), other cardiovascular disease (76-80%; $p=0.17$). Excluding other cardiovascular disease, the median number of comorbid conditions was 3 in each race/ethnicity. Among black, white, Hispanic and other, only 5.8%, 4.4%, 9.0%, and 7.3% had zero comorbidities, and 14.2%, 11.4%, 12.4%, 15.8% had only one comorbidity, respectively. Hispanics (53%) were less likely than blacks (62%), whites (61%), or others (57%) to be prescribed ACE-inhibitor/ARB, beta-blockers, aldosterone antagonists, and/or other cardiovascular drugs including combination nitrates/hydralazine ($p<0.001$). **CONCLUSIONS:** Whites were most likely to be diagnosed with COPD, psychological disorders, hyperlipidemia, and chronic ischemic heart disease. Hypertension was most likely among Blacks, and renal dysfunction most likely among Hispanics.

PCV11

COMORBIDITY BURDEN AMONG HEART FAILURE PATIENTS IN A MEDICAID POPULATION

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OBJECTIVES: Increasing prevalence of heart failure, increasing enrollment in state programs, sparse literature on population-based heart failure studies, and the associations between lower socioeconomic status and increased comorbidity burden necessitate an examination of the prevalence of HF comorbidities in a contemporary Medicaid population. **METHODS:** Medical/prescription/enrollment records from the Maryland State Medicaid Managed Care Organization/Fee-for-services, ages 18-64, non-dual enrolled, with HF diagnosis between July 1, 2005 to December 31, 2009, followed at least 3 months. Diagnosis for HF defined as earliest encounter claim that included ICD-9 code 428.xx. Comorbidity diagnoses determined between earliest claim and within three months post-HF diagnosis. The frequencies and cross-frequencies of the selected comorbidities are examined. **RESULTS:** Among 15,764 HF patients, 60% (n=9,388) were black, 33% (n=5,158) white, 6% (n=919) other, 2% (n=299) Hispanic. Over half were female (55%); 29% were ages 18-44, 36% ages 45-54, and 36% ages 55-64. The most common comorbidity was other cardiovascular disease (CVD, 78%), followed by hypertension (73%), psychological disorder (57%), chronic ischemic heart disease (43%), diabetes (41%), hyperlipidemia (37%), chronic obstructive pulmonary disease (28%), renal dysfunction (28%), and stroke (21%). This pattern persisted within any particular comorbidity group. Excluding hypertension and other CVD: 10% of patients had zero comorbidities, 20% had only one, 70% had multiple comorbidities; 0.7% (n=114) had every comorbidity above. The median number of comorbidities was 2; median being 4 if hypertension and other CVD are included. **CONCLUSIONS:** An overwhelming majority of HF patients enrolled in Maryland Medicaid have multiple comorbidities. The prevalence of any comorbidity above was no less than 21%; the most prevalent comorbidities being hypertension, other CVD, and psychological disorder. Our findings call attention to the level comorbidity in a high-risk Medicaid population, reflecting a demographic largely

under-represented in large scale studies or clinical trials. Future research should identify clinical and hospitalization issues associated with prevalent disease in this population.

PCV12

DISEASE MODIFYING THERAPY AND THE RISK OF HOSPITALIZATION IN PATIENTS WITH HEART FAILURE: A CONTEMPORARY MEDICAID COHORT ANALYSIS

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OBJECTIVES: Increasing prevalence of heart failure (HF), increasing enrollment in state programs, sparse literatures on population-based heart failure studies, and the burden of hospitalization among Medicaid patients necessitate an analysis of risk factors for heart failure hospitalization in a contemporary Medicaid population. **METHODS:** Claims from Maryland State Medicaid, for 14,149 non-dually enrolled, 18-64 year olds with a diagnosis for HF between 7/1/05-12/31/09, followed for at least six months. We examine the effects of comorbidity and first-line therapy use on the risk of any hospitalization after HF diagnosis. Multivariate Weighted Cox Regressions were used to address non-proportional risk of hospitalization over the follow-up period. We report numbers needed to treat with first-line therapy to prevent one hospitalization annually. **RESULTS:** Most patients were >45 years (71%), female (56%), and black (60%). Use prevalence was: beta-blockers (26%), ACE-inhibitors/ARB (29%), aldosterone antagonists (AA, 5%), and others including nitrates+hydralazine (37%). Nearly all (98%) were diagnosed with one or more comorbidities. Relative risk (95% CI) for any hospitalization was 1.43 (1.36-1.51) renal dysfunction, 1.40 (1.31-1.50) other cardiovascular, 1.33 (1.26-1.40) COPD, 1.28 (1.22-1.35) chronic ischemic heart disease, 1.27 (1.20-1.34) stroke, 1.26 (1.20-1.32) diabetes, 1.11 (1.05-1.17) hypertension, 0.81 (0.77-0.85) hyperlipidemia, 0.77 (0.73-0.81) psychological disorder; 0.77 (0.73-0.81) ACE inhibitor/ARB, 0.83 (0.79-0.87) beta-blocker, 0.76 (0.72-0.80) other cardiovascular drugs. AA and/or nitrates+hydralazine combination had no impact. The C-statistic for predicted 1-year hospitalization risk within the sample was 0.80. Numbers needed to treat to prevent one hospitalization annually: 12 ACE-inhibitor/ARB, 15 beta-blockers, or 11 other cardiovascular drugs. **CONCLUSIONS:** We elicit the specific risk attributable to lead risk factors in HF patients enrolled in Medicaid plans, and show certain disease modifying therapies can quantifiably mitigate risk of hospitalization. Growing ranks of state Medicaid plans and other entitlement programs call for more deliberate, proactive and cost-effective disease and risk management of plan enrollees.

PCV13

RECURRENCE AND RISK FACTORS IN HOSPITALIZED PATIENTS WITH ACUTE VENOUS THROMBOEMBOLISM: A CLAIMS DATABASE ANALYSIS

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OBJECTIVES: Venous thromboembolism (VTE) includes deep-vein thrombosis (DVT) and pulmonary embolism (PE), with a considerable risk of recurrence and mortality. This study examined the recurrence rate and associated risk factors in hospitalized patients with acute VTE in the US clinical practice setting. **METHODS:** Adult patients with VTE were selected from the linked MarketScan and Hospital Discharge database in an inpatient setting between 07/01/2006-12/31/2011. The first hospitalization with a diagnosis of VTE (ICD-9-CM: 451-453, 671.3, 671.4, 671.9, 415.1, 673.2, or 673.8) was designated as index hospitalization. Patients were required to have at least 6 months continuous enrollment and have no VTE diagnosis in the 6 months prior to index hospitalization. Patients were followed until the earliest of VTE recurrence, death, disenrollment, or the end of study. VTE recurrence was defined as re-hospitalization with VTE at least 1 day after discharge from index hospitalization. Cox regression was used to model time to recurrence and examine demographic and clinical factors associated with recurrence. **RESULTS:** A total of 957 patients were eligible for the study, including 570 patients with DVT only (59.6%); 237 with PE only (24.7%); and 150 with both DVT and PE (15.7%). Mean age was 62.8 years (SD=15.2), and 432 were male (45.1%). Mean follow-up time was 23.1 months. During follow-up, 146 patients recurred, with a recurrence rate of 15.3%. The average time to recurrence was 20.1 months (median=15.4). Number of comorbid conditions as measured by Charlson Comorbidity Index was independently associated with increased risk for VTE recurrence (hazard ratio [HR]: 1.12, 95%CI=1.05 - 1.20). **CONCLUSIONS:** More than 15% of hospitalized patients with acute VTE recurred during an average follow-up period of 23 months in the real clinical setting. Comorbidities were associated with increased risk for recurrence. Further research needs to examine recurrence and its economic outcomes associated with VTE treatment patterns.

PCV14

IMPACT OF INITIATING STATIN THERAPY AT A HIGH DOSE - A RETROSPECTIVE OBSERVATIONAL STUDY POPULATIONS IN THE UNITED KINGDOM

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OBJECTIVES: High-dose statin therapy has been reported to be associated with increased risk of side effects, which may reduce treatment adherence and impact cardiovascular (CV) outcomes. This study assessed association between initial statin dose and treatment adherence and persistence and its impact on CV outcomes in the overall and sub-population with prior CV events. **METHODS:** An observational, retrospective study was conducted in a UK linked database (CPRD) comprising primary care, secondary care (Hospital Episode Statistics), and